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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/609,419	07/01/2003	Jiawei Hu	01263.002318.	9467
5514	7590	01/26/2006	EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			STOICA, MARIA	
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DATE MAILED: 01/26/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/609,419	Applicant(s) HU ET AL.	
	Examiner Maria Stoica	Art Unit 3715	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7/28/03, 4/27/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. Applicant is reminded of the section titles and ordering of the specification:
 - (a) Title of the Invention: See 37 CFR 1.72(a) and MPEP § 606. The title of the invention should be placed at the top of the first page of the specification unless the title is provided in an application data sheet. The title of the invention should be brief but technically accurate and descriptive, preferably from two to seven words may not contain more than 500 characters.
 - (b) Cross-References to Related Applications: See 37 CFR 1.78 and MPEP § 201.11.
 - (c) Statement Regarding Federally Sponsored Research and Development: See MPEP § 310.
 - (d) The Names Of The Parties To A Joint Research Agreement: See 37 CFR 1.71(g).
 - (e) Incorporation-By-Reference Of Material Submitted On a Compact Disc: The specification is required to include an incorporation-by-reference of electronic documents that are to become part of the permanent United States Patent and Trademark Office records in the file of a patent application. See 37 CFR 1.52(e) and MPEP § 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text were permitted as electronic documents on compact discs beginning on September 8, 2000.

Or alternatively, Reference to a "Microfiche Appendix": See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.
 - (f) Background of the Invention: See MPEP § 608.01(c). The specification should set forth the Background of the Invention in two parts:
 - (1) Field of the Invention: A statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the applicable U.S. patent classification definitions of the subject

matter of the claimed invention. This item may also be titled "Technical Field."

- (2) Description of the Related Art including information disclosed under 37 CFR 1.97 and 37 CFR 1.98: A description of the related art known to the applicant and including, if applicable, references to specific related art and problems involved in the prior art which are solved by the applicant's invention. This item may also be titled "Background Art."
- (g) Brief Summary of the Invention: See MPEP § 608.01(d). A brief summary or general statement of the invention as set forth in 37 CFR 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention.
- (h) Brief Description of the Several Views of the Drawing(s): See MPEP § 608.01(f). A reference to and brief description of the drawing(s) as set forth in 37 CFR 1.74.
- (i) Detailed Description of the Invention: See MPEP § 608.01(g). A description of the preferred embodiment(s) of the invention as required in 37 CFR 1.71. The description should be as short and specific as is necessary to describe the invention adequately and accurately. Where elements or groups of elements, compounds, and processes, which are conventional and generally widely known in the field of the invention described and their exact nature or type is not necessary for an understanding and use of the invention by a person skilled in the art, they should not be described in detail. However, where particularly complicated subject matter is involved or where the elements, compounds, or processes may not be commonly or widely known in the field, the specification should refer to another patent or readily available publication which adequately describes the subject matter.
- (j) Claim or Claims: See 37 CFR 1.75 and MPEP § 608.01(m). The claim or claims must commence on separate sheet or electronic page (37 CFR 1.52(b)(3)). Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation.

There may be plural indentations to further segregate subcombinations or related steps. See 37 CFR 1.75 and MPEP § 608.01(i)-(p).

- (k) Abstract of the Disclosure: See MPEP § 608.01(f). A brief narrative of the disclosure as a whole in a single paragraph of 150 words or less commencing on a separate sheet following the claims. In an international application which has entered the national stage (37 CFR 1.491(b)), the applicant need not submit an abstract commencing on a separate sheet if an abstract was published with the international application under PCT Article 21. The abstract that appears on the cover page of the pamphlet published by the International Bureau (IB) of the World Intellectual Property Organization (WIPO) is the abstract that will be used by the USPTO. See MPEP § 1893.03(e).
- (l) Sequence Listing. See 37 CFR 1.821-1.825 and MPEP §§ 2421-2431. The requirement for a sequence listing applies to all sequences disclosed in a given application, whether the sequences are claimed or not. See MPEP § 2421.02.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 31-35 are rejected under 35 U.S.C. 101 because the claimed inventions are directed to non-statutory subject matter. A user interface, program instructions, and signals are non-statutory because these items are not products of manufacture, processes or machines.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-2, 4-5, 7-14, 16-17, 19-20, 22-29, 31, and 33-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Vogel (US Patent No. 5,963,965).

Regarding claims 1, 16, and 33-36, Vogel discloses an apparatus and method for providing a user with an indication of the content of a text (Abstract), the apparatus or method comprising receiving means for receiving text data (col. 5, lines 26-27), topic determining means for determining from the text data at least one topic (col. 6, lines 14-27; col. 9, lines 27-30), topic representation data providing means arranged to provide topic representation data defining a graphical representation of the at least one topic in which are distributed visual indicia representing at least some of the context data with the distribution of the visual indicia indicating the positions within the text data of the corresponding context data (col. 15, lines 53-62), topic context data identifying means for identifying in the text data context data associated with the at least one topic determined by the topic determining means (col. 11, lines 33-36), and supplying means for supplying the topic representation data for enabling display of the at least one topic representation to a user (col. 11, lines 27-28).

Regarding claims 2 and 17, Vogel discloses an apparatus and method, further comprising significance determining means for determining the relative significance of context data associated with the at least one topic, wherein the topic representation data providing means arranged to provide a graphical representation that provides a visual indication of the relative significance of occurrence of the context data (col. 15, lines 54-66).

Regarding claims 4 and 19, Vogel discloses that the topic representation data providing means is arranged to provide topic representation data comprising data that determines the appearance of the visual indicia in accordance with the relative significance of the context data (col. 13, lines 3-7).

Regarding claims 5 and 20, Vogel discloses that the significance determining means is arranged to determine the significance of context data in accordance with at least one of frequency of occurrence in the text data, position of occurrence in the text data and its appearance within the text data (col. 12, lines 60-65).

Regarding claims 7 and 22, Vogel discloses that the topic representation data providing means is arranged to provide topic representation data wherein the relative positions of the visual indicia represent the relative positions of the context data in the text data (col. 17, lines 4-8).

Regarding claims 8 and 23, Vogel discloses that the topic representation data providing means is arranged to provide topic representation data wherein the scale of distribution of the visual indicia is non-linear and is relatively enlarged in at least one of the following situations: where the visual indicia are close together; and where the visual indicia are more significant (col. 16, lines 48-51).

Regarding claims 9 and 24, Vogel discloses selection means for enabling a user to select visual indicia (col. 17, lines 65-67), and highlighting means for causing any other visual indicia associated with the same context data as the selected visual indicia to be highlighted (col. 17, line 65-col. 18, line 5 and Figure 17).

Regarding claims 10 and 25, Vogel discloses modifying means for modifying the visual indicia of a topic representation (col. 5, lines 39-42).

Regarding claims 11 and 26, Vogel discloses that the topic determining means is arranged to determine a number of different topics from the text data (col. 13, lines 11-21); the topic context data identifying means is arranged to identify in the text data respective context data for each topic (col. 13, lines 31-40); and the topic representation data providing means is arranged to provide topic representation data defining a respective graphical representation for each topic (col. 16, lines 6-8).

Regarding claims 12 and 27, Vogel discloses that the topic determining means is arranged to determine from the text data at least one of the number of occurrences of the same lexical item and the number of occurrences of lexical items sharing a relationship and defining a lexical item set to identify the topic or topics in accordance with the highest such occurrences (col. 14, lines 7-15).

Regarding claims 13 and 28, Vogel discloses that the topic determining means is arranged to determine from the text data at least one of the number of occurrences of the same noun and the number of occurrences of nouns sharing a relationship and defining a noun set to identify the topic or topics in accordance with the highest such occurrences (col. 13, lines 9-14, 40-46; col. 14, lines 8-26, 37-41).

Regarding claims 14 and 29, Vogel discloses that the topic determining means is arranged to identify lexical chains in the phrase-identified text data and to identify as the topic or topics the lexical chain or chains having the highest number of components (col. 13, lines 40+).

Regarding claim 31, Vogel discloses a user interface comprising topic representation display means arranged to display in a display area a graphical representation of a topic in which are distributed visual indicia representing context data associated with that topic and a cursor; user input receiving means for receiving user input from a user input device and for moving the cursor in the display area in accordance with the user input; and modifying means for modifying the graphical topic representation when the cursor is placed over a visual indicia (col. 15, line 56 – col. 16, line 5).

6. Claim 32 is rejected under 35 U.S.C. 102(b) as being anticipated by Rose et al. (US Patent No. 5,838,323). Rose discloses a user interface comprising display means arranged to display a display region having first and second display areas adjacent to one another and configured to display in the first display area at least a portion of a text and to display in the second display area a graphical representation of a topic occurring in the text in which graphical representation are distributed visual indicia representing context data associated with that topic, the display means also being arranged to display a cursor in the display region and a scroll bar associated with the first display area; user input means for receiving user input from a user input device and for moving the cursor in the display region in accordance with the user input; and scrolling means for scrolling both the text in the first display area and the topic representation in the second display area when user input is received by the user input means that causes the cursor to move to input a scroll instruction (Figure 2; col. 4, line 64 – col. 5, line 7).

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 3 and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Batchilo et al. (US Patent Application Publication 2003/0130837). Batchilo discloses an apparatus and method for providing a user with an indication of the content of a text (Abstract), the apparatus comprising: a part-of-speech associator for associating words in text data with part-of-speech identifiers to produce part-of-speech identified text data (p. 3, par. 45); a topic determiner for determining from the part-of-speech-identified text data at least one topic that occurs in the text data (p. 3, par. 46); a topic context data identifier for identifying in the text data context data associated with the at least one topic determined by the topic determiner (p. 7, par. 184); a topic representation data provider arranged to provide topic representation data defining a graphical representation of the topic in which are distributed visual indicia representing at least some of the context data with the distribution of the visual indicia represent the relative positions within the text data of the corresponding context data (see Figure 10); and a display controller for causing a display to display the topic representation (inherent from Figures 9 & 10).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 6 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vogel in view of Rose. Vogel discloses that the representative data should be graphically represented as a map. However, Vogel does not expressly disclose that the map be linear. Rose teaches that the topic representation data-providing means is arranged to provide topic representation data that defines the graphical representation as a line along which the visual indicia are distributed (see Figure 2). It would have been obvious to one of ordinary skill in the art at the time of invention to linearize the map representation of Vogel, as taught by Rose, in order to provide an ordered condensation representation of the content of a piece of text that is more easy to follow visually.

11. Claims 15 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vogel in view of Kupiec (US Patent No. 6,533,822). Vogel does not expressly disclose that the text in accordance with the keyword(s) selected is displayed as a summary. However, Kupiec teaches this aspect (Abstract). It would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the teaching of Kupiec into the method and apparatus of Vogel in order to provide the user with a

truncated version of the text containing the keywords in order to make it easier for the user to skim through the portions of text containing the keywords searched by the user.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Abu-Hakima (US Patent No. 6,823,331), Abu-Hakima et al. (US Patent No. 6,820,237), Bornstein (US Patent No. 5,867,164), Ueda (US Patent No. 6,493,663), Nagao (US Patent No. 6,985,864), Nakao (US Patent Nos. 6,205,456 and 6,963,830), and Witbrock et al. (US Patent Nos. 6,317,708 and 6,581,057) relate to summarization of text using frequency of keywords, text truncation, and hierarchy. Wacholder (US Patent No. 6,167,368), Namba et al. (US Patent No. 5,321,608), Hamphill et al. (US Patent No. 5,083,268), and Caid et al. (US Patent No. 5,619,709) relate to techniques of extracting essential information from text.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maria Stoica whose telephone number is (571) 272-5564. The examiner can normally be reached on M-F: 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Monica Carter can be reached on (571) 272-4475. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3715

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MS


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